U.S. Environmental Protection Agency Region 3, Chesapeake Bay Program Office

Next Generation Information Technology Infrastructure Support for the Chesapeake Bay Program's Science, Analysis, and Implementation Missions

Statement of Work



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1 BACKGROUND AND SCOPE

This Statement of Work (SOW) specifies the tasks required to support the science mission of the U. S. Environmental Protection Agency (EPA) Chesapeake Bay Program Office (CBPO) by providing the next generation of IT infrastructure support services for the CBPO campus in Annapolis, Maryland. The Chesapeake Bay Program (CBP) is a unique, regional partnership that has led and directed the restoration of the Chesapeake Bay since 1983. CBP partners include the states of Maryland, Pennsylvania, and Virginia; the District of Columbia; the Chesapeake Bay Commission, a tristate legislative body; the Environmental Protection Agency, representing federal government; and participating citizen advisory groups.

This SOW provides advanced information technology infrastructure staffing support to the CBP Data Center, which provides a broad range of information technology support to the Chesapeake Bay Program partnership, as well as the Chesapeake Bay Program Office campus located in Annapolis, Maryland. The Data Center is responsible for supporting the development of scientifically-based, locally focused decision support tools, including advanced environmental modeling, data simulation, and data visualization applications that allow Partnership leaders to make scientifically sound management decisions. To support this need, the Data Center is responsible for designing, implementing, and maintaining a high performance computing (HPC) environment that provides substantial, on-demand capacity.

The Data Center also supports the Chesapeake Bay Program Office campus in Annapolis, Maryland by managing the computer systems and networks that support on-campus and remote users. This includes managing both the EPA network and the Chesapeake Information Management System (CIMS) partnership network. The CIMS network is the focal point for scientific collaboration across the state-federal-local-academic partnership and supports a robust, scientific, and technical community of on-campus and remotely connected estuarine and watershed scientists, modelers, and data analysts.

Effective management and support of information technology objectives allow scientifically-based decision making and allow CBP to carry out its mission of protecting and restoring the Chesapeake Bay. The Data Center manages and oversees principally all information technology activities in the following critical areas: network, infrastructure, and security implementation and management; scientific system and decision support system development, including environmental modeling, visualization, simulation, tracking and accountability; and enterprise, authoritative data management.

Successful implementation of the statement of work requires specialized technical expertise within an environmental science-based context. To that end, supporting this requirement requires both substantial technical expertise in information technology solutions and subject matter expertise in managing technology infrastructure supporting estuarine and watershed modeling platforms. Specifically, successful implementation requires experience and expertise in designing, implementing and managing high performance computing environments in both WAN and Cloud-based contexts.

2 GENERAL OBJECTIVES

The objective of this effort is to provide a very high level of information technology support and subject matter expertise to support the Chesapeake Bay Program's high performance computing infrastructure, which includes designing, implementing, and managing the technology infrastructure supporting:

- · estuarine and watershed modeling platforms;
- scientific decision support systems;
- · web-based communication products;
- · multiple onsite computer networks; and
- various onsite and offsite end-users;

as well as managing a computer help desk; designing, implementing, and managing HPC environments in Cloud and WAN contexts; and maintaining an information technology security in concert with NIST and EPA published security policies.

The contractor shall be responsible for providing:

- Stable, secure and highly available high performance computing environments (EPA and CIMS networks) for the CBPO campus and CBP Partnership remote users;
- Effective, cost-efficient, and stable HPC environments with appropriate elasticity, capacity on-demand, and compute capacity to support environmental modeling activities in both WAN and Cloud-based contexts;
- Well-designed and -managed infrastructure to support highly available scientifically-based decision support systems (web-based, Cloud-based, and client/server);
- Well-designed and -managed infrastructure to support highly available user-focused administrative systems (web-based, Cloud-based, and client/server) that automate and streamline common administrative processes;
- Well-designed and -managed infrastructure to support authoritative data asset management throughout the full data lifecycle, including planning, collecting, managing, and archiving;
- Assessment and implementation of emerging technologies as a means to satisfy business requirements, including, but not limited to: Cloud computing; service-based architectures; big data; data visualization; data analytics and business intelligence;
- Skilled project management, utilizing best-practices to accomplish all work under this
 effort, including: project planning, scheduling, documentation, SLDC utilization, etc.,
 consistent with practices set forth in the PMI/PMBOK/ISO; and
- Infrastructure lifecycle management utilizing Agile methodology and Kanban task management techniques.

3 PERIOD OF PERFORMANCE

The resulting delivery order issued to the successful offeror shall be for one base year plus two oneyear option periods of performance:

Base Year	April 17, 2017 - April 16, 2018
Option Year 1	April 17, 2018 - April 16, 2019
Option Year 2	April 17, 2019 - April 16, 2020

4 HOURS AND PLACE OF PERFORMANCE

Business hours for CBP are 7:00 am to 6:00 pm, Monday through Friday, except Federal holidays or when the government facility is closed due to emergencies, administrative closings, or similar Government directed facility closings.

The contractor shall not provide coverage in other instances including when EPA closes an EPA facility for all or a portion of a business as a result of: 1) granting administrative leave to non-

essential EPA employees (e.g., unanticipated holiday); 2) inclement weather; 3) failure of Congress to appropriate operational funds; 4) any other day designated by Federal Law, Executive Order or Presidential Proclamation; or 5) other reason as determined by EPA (e.g., designated furlough day for federal workers).

The primary place of performance for activities included in this SOW is:

U.S. Environmental Protection Agency Chesapeake Bay Program Office 410 Severn Avenue Annapolis, Maryland 21403

Successfully performing this statement of work may require performance outside of normal business hours and performance at alternate work locations. There may be valid business cases for the contractor to work from an alternate location. These instances will be infrequent, short in duration, and limited to rapid, high-priority response issues that arise during non-core hours. In consultation with the COR, both parties may agree that performing rapid, high-priority response support from an alternate work location to be in the best interest to both parties. The COR may authorize after hours work and/or work from an alternate location on a case-by-case basis. The contractor shall not perform after hours work and/or work from an alternate location unless and until authorized in advance by the COR or CO. Offerors shall factor these scenarios into their respective technical approaches. Should overtime be necessary within a contract period, overtime costs shall not exceed \$10,000 annually; therefore, offerors shall not factor overtime or after hours work into their respective cost proposals.

5 COMPUTER SYSTEMS OPERATIONS AND MAINTENANCE

The Data Center is responsible for providing a stable, secure, and highly available computing environment for staff resident at the Chesapeake Bay Program Office in Annapolis, Maryland, as well staff working from a variety of remote sites.

The scope of this activity includes infrastructure on the Chesapeake Bay Program's instance of the EPA network, the Chesapeake Information Management System (CIMS) partnership network, and infrastructure staged in commercially available Cloud infrastructure and implemented through IaaS, PaaS, and SaaS.

To accomplish this task, it is critical that the contractor have in-depth, subject matter expert knowledge of high performance computing (HPC) platforms supporting environmentally-based scientific models, simulations, and data visualizations in both Linux clustered environments and Cloud environments.

5.1 Manage technology infrastructure

The contractor shall be responsible for ensuring a stable, secure, and highly available computing environment in support of CBP by actively planning for, implementing, securing, and managing infrastructure assets including: physical and virtual servers; network infrastructure (firewalls, routers, switches, *etc.*,); desktop computers and laptops; and mobile devices.

Objectives include timely help desk response time; detection and mitigation of malicious activity; highly available computing environments; and no loss of data, leading to high levels of staff productivity. See section 9, *Appendix I: Service Level Agreements* for more information on specific SLAs.

The contractor shall be responsible for managing and maintaining all hardware and software assets on behalf of the program. This includes, but is not limited to, the assets described in section 6, *Technical Environment*. Additionally, the contractor shall be responsible for maintaining an accurate inventory of hardware, software, and consumables (printer supplies, etc.,).

Working collaboratively with contract staff supporting the scientific systems development and database activities, the contractor shall develop relevant computing environments, including development, test, and production environments to stage applications at various phases within the development lifecycle. For web-based applications, the contractor is responsible for managing web hosting environments using Microsoft IIS and Apache/Tomcat and Internet domain registration and management. Additionally, the contractor shall support environments hosting content management system in use by CBP, including Expression Engine, Wordpress, and Drupal.

The contractor shall be responsible for developing relevant computing capacity and environments for scientific systems utilizing environments such as the Microsoft .NET framework. This includes both Windows-based server administration and Linux-based server administration. The contractor shall monitor and performance-tune both physical and virtual servers to support the programmatic need.

The contractor shall develop infrastructure modernization and capacity plans to forecast computing needs required to support the CBP. These strategic plans shall be developed as a result of eliciting and documenting multi-year requirements from staff scientists and program leads. The outcome is a suite of recommendations leading to the development of comprehensive strategic plans.

The contractor shall be responsible for developing, updating, and maintaining documentation for desktop hardware, software, printers, and peripherals. This documentation shall include user manuals, system hardware and software documentation, instructions and training for customers to troubleshoot and resolve IT equipment, hardware, software, printers, large format print devices and peripheral equipment problems, as well as providing evaluations and recommendations for accomplishing desired objectives, investigating and demonstrating new hardware/software capabilities as requested by EPA.

The contractor shall be responsible for employee relocations, movement of PCs, peripherals and printers, the installation of new user equipment, as well as maintaining the inventory database. The contractor shall provide assistance in maintaining inventory control and location records of EPA computer equipment/software and disposal of property as required.

The current equipment profile consists of approximately 80% laptops and 20% desktops supporting a user

base of approximately 100 onsite and 200 remote users. Approximately 30 LAN-enabled printers are deployed and require support under this statement of work.

The user community operates on one of two standard computing platforms: the EPA computing platform and the Chesapeake Information Management (CIMS) computing platform. Both are uniformly configured per the U.S. Government Configuration Baseline (USGCB), run Microsoft Windows 7 (or above), are maintained uniformly via regular patches and updates, and operate off a common core image. Individual systems may have a wide variety of application outside the common core depending on individual business needs required to satisfy performance of work.

CBPO's mobile workforce may be indirectly connected to the EPA and/or CIMS networks via an internet service provider by means of Air-card, DSL, dial-up, or other forms on telecommunications.

This mobile workforce is composed of individuals that may: be working from home (or other locations); have medical, or alternate work schedule (AWS) agreements; be on travel at conference centers, training, or other duty stations; or be conducting experiments, sampling, or research "in the field", or working "off-line" performing investigative assignments, *etc*. EPA maintains some stand-alone computers that support multiple staff members that require user-specific management of software configurations and profiles.

CBP's standard hardware and software profile is subject to a quarterly review and may change over the period of this SOW based on the incorporation of emerging technology. The successful vendor shall be capable of evolving along with technology. The Data Center strives to be on the leading edge of emerging technologies by closely monitoring trends in information science.

The contractor shall provide advanced technical expertise through staff resources that support the Data Center's responsibilities as they pertain to the overall CBP mission of protecting and restoring the Chesapeake Bay. CBP presently receives scientific application development support, database management, and telecommunications and VoIP system services support under other existing contracts and, therefore, these responsibilities are not within the scope of this order. The selected vendor shall work collaboratively to develop state of the art technical solutions supporting CBP's mission by fully collaborating and cooperating with other CBP mission IT support contractors.

The contractor shall integrate any technology changes and upgrades as approved by CBPO management to meet user requirements and to maintain operational currency of IT systems and network functions. The government may require an increase or decrease of staff and/or the addition of labor categories to support new solutions or technical approaches. To the extent possible, vendors should factor these considerations in their responses, allowing flexibility in the staffing model to evolve with technology changes. The contractor shall coordinate and collaborate with other EPA and partnership infrastructure IT service providers (ex: VoIP, PBX, switches, routers, hubs, Wireless LANs, network wiring, printers/copiers/scanners).

The contractor shall attend CBPO meetings for project planning/status, project request, project review, and other sustainment activities. The contractor shall be prepared to answer questions pertaining to the contractor's responsibilities as detailed in this SOW to include presenting the results of research completed and recommendations to the Contracting Officer Representative (COR) and other relevant EPA representatives.

5.2 Design, implement, and manage high performance computing environments

The contractor shall provide innovative approaches and stay abreast of technology trends, contributing to the overall short and long term direction of the Data Center's mission of supporting CBP. The contractor shall design, implement and maintain high performance computing (HPC) environments on behalf of the program. The HPC environments shall be staged in WAN and Cloudbased contexts. The contractor shall be responsible for designing systems that deliver capacity on demand in a cost effective manner.

5.3 Staff and manage onsite help desk

The contractor shall be responsible for managing an information technology help desk, providing support to scientific staff located at the Chesapeake Bay Program Office in Annapolis, Maryland, as well as staff working from a variety of remote sites. The IT help desk shall be onsite and is operated during normal business hours (7:00 am – 6:00 pm EST, Monday – Friday, excluding Federal holidays). However, help desk assistance may be required outside of normal business hours. The

contractor staff shall maintain a knowledgebase documenting help desk calls, issues, and resolutions to document solutions to common help desk calls. All calls to the help desk shall be logged in the appropriate help desk tracking software (Jira and Confluence).

The help desk shall serve CBP staff as the initial point of contact for troubleshooting hardware/software PC and printer device problems. The contractor shall contact vendors or manufacturers for technical solutions, as needed and with COR approval. Help desk staff shall standardize desktop hardware and software as well as maintain configuration control, administer desktops systems, and rebuild systems as necessary. Help desk services shall be provided over the phone, via email, and in-person as needed.

EPA currently has approximately 5 designated Executive/Senior Management users that are automatically supported as high priority. EPA will provide the list of Executive/Senior Management users and may change the list of users at its sole discretion periodically, as needed.

CBPO's help desk support is divided into two tiers providing escalating levels of support and turnaround times. All help desk technicians must be physically capable of performing desk side visits and lifting up to 35 lbs.

- Tier I support provides initial support for basic user needs. The role of the technician at this level is to gather user information and determine the user issue by analyzing the symptoms and identifying the underlying problem. Once the technician has accurately identified the problem and logged it into the appropriate work order system, the assigned technician attempts to resolve the user's problem. Problems not resolved at this level are escalated to Tier II support.
- Tier II support handles the most difficult and advanced problems. Tier II level requests may be transferred to an EPA federal employee for action as is consistent with existing SLA call handling procedures. In the instance that a Tier II level call is handled by a contractor, the contractor shall perform expert-level troubleshooting and analysis of issues and problems. S/He is responsible for assisting Tier I support and for the research and development of solutions to new or unresolved issues. When a solution to the problem is determined, Tier II support is responsible for designing and developing one or more courses of action, evaluating each of these courses in a test case environment, and implementing the best solution to the problem. Once the solution has been identified, the technician provides the deliverable and makes it available for future troubleshooting and analysis. The problem or issue then becomes known how to resolve in a written process that can be addressed by Tier I support in the future.

The help desk receives approximately 2,000 calls per year on a variety of topics. Calls are logged in Jira, which serves as the knowledgebase for common problems. The contractor shall maintain and update the knowledgebase as solutions to common problems are documented.

5.4 Maintain information technology security

The contractor shall support security incident reporting on all CBP computer security incidents, including: supporting vulnerability assessments in accordance with authority directives; performing information assurance vulnerability compliance scans against the servers and workstations; scanning the networks to perform vulnerability assessments; installing the latest releases and updates for the client software or appropriate scanning tools; reviewing and storing the systems, security, applications, and network event logs as required by CBP policy.

6 TECHNICAL ENVIRONMENT

The Data Center supports a broad range of hardware and software technologies. Obviously, technology is advancing at a rapid pace; however, it is important to describe the current technology portfolio to document the complexity of the technology to be supported by this effort. It is important to note that the portfolio is dynamic. The expectation is the support provided under this effort keep pace with the changing technology landscape.

The following table provides insight into the current data center technology portfolio.

Support Area	Category	Technology
Computer Systems	Personal Computer, Laptop	x86-base; flat panel monitor; 10/100
Operations and		Ethernet connection; Energy Star 4.0
Maintenance		compliant; Microsoft Windows;
		Apple/Mac iOS
	Wireless Handheld Email Device	iPhone
	Authentication Hardware	Remote authentication technology
	Office Applications Productivity	Microsoft Office; Microsoft Office
		365, Microsoft SharePoint; Office
		applications
	Extended Office Applications	Microsoft Visio; Microsoft Project
	Email	Microsoft Outlook; Microsoft Office
		365; Office Web App; Lotus Notes
	Audio/Video Chat; On-line	Microsoft Lync
	Collaboration; Web Conferencing	
	Advanced Graphics; PDF	Adobe Reader; Adobe Acrobat;
	Creation; PDF Viewer	Adobe Photoshop; Adobe Illustrator;
		Adobe Creative Cloud; Adobe
		Creative Suite
	Geographic Information Systems	ESRI ArcGIS Desktop; ArcGIS Pro;
		ArcGIS Server
	Statistical Analysis/Analytics	SAS; S-Plus; R; Tableau
	Anti-Virus; Anti-Spyware	Symantec Endpoint Protection;
		Malware Bytes
	Desktop Firewall	Microsoft Windows Firewall
	Remote Access VPN Client	Juniper Networks Network Connect
		and Host Checker
	Patch Management;	IBM Tivoli endpoint Manager;
	Configuration Policy;	SolarWinds; LanSweeper; Nagios;
	Compliance Monitoring;	Nexpose, Jenkins; Puppet
	Software Deployment; Asset	(100 pt)
	Discovery and Inventory	
	Server Operating System	Microsoft Windows Server 2012;
		Microsoft Windows Server 2008;

		Microsoft Windows Server 2003;		
		RedHat Linux; SUSE Linux		
	Server Virtualization			
	Data Backup and Recovery	VMware vSphere		
22	•	Symantec Backup Exec		
	Network Routing/Switching	Cisco IOS		
	Transport Protocol	TCP/IP		
	Dynamic Host Control Protocol			
	(DHCP) Services			
	Directory Services	Microsoft Active Directory; Azure		
		Active Directory		
	Administrative Applications and Services			
	Cloud-based Systems	Commercially available Cloud systems support of Infrastructure as a Service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS); Amazon Web Services		
Scientific and	Integrated Development	Microsoft Visual Studio		
Administrative	Environment			
Application	Application Development;	Adobe ColdFusion; Microsoft .NET;		
Development	Programming Languages;	C; C+; FORTRAN; PERL; PHP; Python		
	Scripting Languages	*		
	Application Server; Web Server	Microsoft Internet Information		
		Server; Apache; Apache Tomcat;		
		Adobe ColdFusion		
	Geographic Information System Server	ESRI ArcGIS Server		
	Content Management Systems	Ellis Labs Expression Engine;		
		Drupal; Wordpress		
	Development Components	Telerik; Kendo; Hangfire		
	Administrative Applications and	Altassian Jira; Atlassian Confluence		
	Services			
	Cloud-based Systems	Development of applications that leverage commercially available Cloud systems including application development and hyper-threading		
		models that support capacity on		
Database	Relational Database	demand (elasticity property) Microsoft SQL Server; Microsoft		
Administration	Management System (RDBMS)	Access; MySQL		
**************************************	Geographic Information Systems	ESRI ArcSDE		
	Programming; Scripting			
	Database Tools	SQL Stored Procedures; SSIS		
	Database 1001s	RedGate		

Cloud-based Systems	Development and management of data assets in commercially available Cloud systems including traditional SQL/RDBMS instances as well as no SQL and other big data administration methods	
Task Management, Reporting, Kanban, Agile		Atlassian Jira and Confluence

7 SUBMISSION REQUIREMENTS - Deleted

8 CONTRACT ADMINISTRATION

8.1 CONTRACTING OFFICER REPRESENTATIVES

The Contract Officer Representative for this SOW is:

Brian Burch U.S. Environmental Protection Agency Chesapeake Bay Program Office 410 Severn Avenue, Suite 112 Annapolis, Maryland 21043

The Alternate Contract Officer Representative for this SOW is:

Megan Thynge U.S. Environmental Protection Agency Chesapeake Bay Program Office 410 Severn Avenue, Suite 112 Annapolis, Maryland 21043

8.2 CONTRACT MANAGEMENT AND DELIVERABLES

The contractor shall develop regular management reports to track the status of all activities conducted as well as financial reports to track burn down rates. Additionally, the contractor Point of Contact (POC) shall meet weekly with the Contract Officer Representative (COR). CBP utilizes a digital reporting framework that requires continual contactor maintenance. Reports will be made available within the reporting framework for government inspection. This framework includes the use of reporting tools like Kanban tasking boards and Confluence project documentation. Specific management reports and deliverables include, but are not limited to:

#	Deliverable	Due Date
1.1	Weekly Contract Meeting	Weekly: Every Thursday
1.2	Weekly Report	Weekly: available digitally on-demand
2.1	EPA User Account Report	Quarterly: calendar quarter
2.2	CIMS User Account Report	Quarterly: calendar quarter
3.1	Weekly Server Security Report	Weekly: automated delivery
3.2	Weekly Workstation Security Report	Weekly: automated delivery
4.1	Monthly Burndown Report	Monthly: by the 7th of each month
5.1	Operations Guide	Annually: due 31 December each year

8.3 TECHNICAL DIRECTION

The Data Center utilizes Agile and Kanban methods to deliver technical direction. The specific, documented technical direction will be delivered in CBP's Jira tasking system and managed at regular Scrum and Sprint planning meetings.

The contractor shall not perform any tasks under this contract that constitute work of a policy, decision making, or managerial nature that is the direct responsibility of EPA. All content shall be provided by EPA. Communication with the user community for new processes and procedures will be initiated by EPA.

8.4 INVOICE REPORT SUBMISSION

The contractor shall submit, on a monthly basis by the 15th, an Invoice Report in accordance with the Government supplied format. The invoice shall contain all applicable rates, hours expended, and total cost per position/labor category.

8.5 STANDARD OPERATING PROCEDURES

The contractor shall work with the COR to develop and deliver standard operating procedures (SOPs) that outline the steps and procedures to be followed by contracting staff in meeting the objectives of this SOW. The contractor shall provide a review period for the COR to review each of the SOPs and shall incorporate feedback from the COR in the final versions. The contractor shall provide SOP updates as needed or dictated by the SOP update schedule. The SOPs shall be maintained in the existing library of documentation.

8.6 EQUIPMENT, MATERIALS AND FACILITIES

The government shall provide telephones, computer equipment (to include all necessary hardware and software), associated peripheral devices, facsimile machines, copier, and other basic office supplies required to complete the task described in the SOW. The Government shall issue user identification and passwords to Government networks in accordance with established procedures.

All utilities in the facility shall be available for the contractor's use in performance of duties outlined in this SOW. The contractor shall instruct employees in utilities conservation practices. The contractor shall be responsible for operating under conditions that preclude the waste of utilities.

The Government shall furnish the necessary workspace for the contractor staff to provide the support outlined in this SOW. The contractor shall not relocate activities or operational units within assigned facilities or make modifications to facilities without prior approval from the COR. Damages to facilities determined to be the fault of the contractor shall be repaired by the contractor at no expense to the government. The contractor shall return facilities to the government in the same condition as received, except for normal wear and tear and approved modifications.

The contractor shall furnish all property not specifically identified and provided by the Government in this section in performance of this contract. Equipment used by the contractor and interfaces with EPA systems shall be approved by the COR, meet EPA standards, and comply with applicable federal and EPA policies and regulations.

8.7 TRAINING OF CONTRACT EMPLOYEES

The contractor shall provide employees with the required core skills to perform their job duties. Otherwise, training to build or maintain expertise of contractor employees assigned to this contract

shall be provided by the contractor at its own expense except when the Government has given prior approval for training to meet special requirements that are unique to a particular task. Limited training of contractor employees may be authorized when the Government changes IT/IM software or hardware during the performance of an ongoing task and it is determined to be in the best interest of EPA.

Contractor employees shall attend seminars, symposiums, or user group conferences only if the Government certifies that attendance is mandatory for the performance of the task requirements and the COR approves such training in advance. Reimbursement for training shall not be authorized for replacement contractor employees; for the purpose of keeping contractor employees abreast of advances in the state of the art; nor for training contractor employees on equipment, computer languages, or computer operating systems that are available on the commercial market.

The contractor shall have full responsibility for keeping contractor employees trained and abreast of advances in the standard commercial and network technologies implemented in the Agency. Role Based Training and Information Security Assurance Training are annual requirements for all employees with significant information security responsibilities. The contract shall provide documentation upon request that all staff hired in support of this order have completed this training in a timely manner.

8.8 TRAVEL AND OTHER DIRECT COSTS (ODCs)

Limited travel may be required and must be pre-approved by the Contract Officer based on the recommendation of the Contract Officer Representative. Should travel and/or other direct costs be necessary within a contract period, costs shall not exceed \$10,000 annually; offerors do not need to factor travel or other direct costs into their cost proposals.

8.9 SPECIALIZED INFORMATION SECURITY TRAINING FOR STAFF WITH SIGNIFICANT SECURITY RESPONSIBILITIES

- (a) The Contractor must ensure that Contractor personnel with significant information security responsibilities complete specialized information security training based on the requirements defined in the EPA role-based training program (program provided after Contract award). The objective of the information security role-based training is to develop an EPA information security workforce with a common understanding of the concepts, principles, and applications of information security to ensure the confidentiality, integrity and availability of EPA's information and information systems. The Contractor is required to report training completed to ensure competencies are addressed. The Contractor must ensure employee training hours are satisfied in accordance with EPA Security and Privacy Training Standards (provided after Contract award). The Contracting Officer's Representative (COR) will provide additional information for specialized information security training based on the requirements in paragraph (b).
- (b) The following role-based requirements are provided: Completion of annual EPA security awareness training and annual completion of two security role-based training opportunities similar in scope and complexity to EPA's role-based training opportunities.
- (c) The Contractor must ensure that all IT and Information Security personnel receive the necessary technical (for example, operating system, network, security management, and system administration) and security training to carry out their duties and maintain certifications.
- (d) The Contractor agrees to insert in each subcontract or consultant agreement placed hereunder,

provisions which shall conform substantially to the language of this requirement, including this paragraph, unless otherwise authorized by the Contracting Officer.

9 APPENDIX I: SERVICE LEVEL AGREEMENTS

9.1 INFRASTRUCTURE SERVICE LEVEL AGREEMENTS

The infrastructure support shall meet or exceed the following service level agreements:

No.	Support Area	Measure	Description	SLA
1.0	Help Desk	Response Time	The response time for a help desk call or email. This is the immediate, initial response from the help desk, not the resolution time	All help desk calls or email messages received during normal business hours shall be responded to in 15 minutes.
1.1	Help Desk	On-Site Computer Failure	On-site desktop or laptop (EPA owned) fails to boot	Interim solution in place within 2 hours (redirecting to common machine or distributing interim machine). Full resolution within 48 hours.
1.2	Help Desk	Network Connection Failure	On-site desktop or laptop (EPA owned) cannot connect to CIMS or EPA network	CIMS: 2 hours; EPA: 2 hours for issues within CBP control; NA for issues outside CBP control (i.e. EPA systemic problems)
1.3	Help Desk	Login Failure	On-site user is unable to log in to machine and/or network due to password expiration or account being locked, etc.	30 minutes
1.4	Help Desk	Network Drives	Inability to access network drives, not related to network connection failure described in 1.2 (i.e. lost or missing drive mappings, login script issues, etc.)	30 minutes
1.5	Help Desk	Remote connection to CIMS network	Inability for remote users to connect to CIMS network remotely through standard protocols (e.g. VPN)	24 hours for EPA-issued equipment; NA for non-EPA issued equipment.
1.6	Help Desk	WiFi Access	Inability to access wireless connectivity at CBP campus	1 hour for issues not related to item 1.2
1.7	Help Desk	Printing	Inability to print documents to network and/or local printers	1 hour for interim solution (redirect to nearby printer); 2 hours for final solution
1.8	Infrastructure	No loss of digital files	No loss of documents or data stored on EPA or CIMS network drives (currently F:, and G: drives)	100% success in restoring files last updated within the past 7 years; 75% success for files older than 7 years
1.9	Reporting	Operations Manual	Development and delivery of an annual operations manual documenting the SOP and operations procedures for all infrastructure	100% of operations manuals delivered by COB December 31st each year

9.2 MANAGEMENT SERVICE LEVEL AGREEMENTS

The management support shall meet or exceed the following service level agreements:

No.	Support Area	Measure	Description	SLA
1.0	Management	Reporting - Weekly	Weekly report to be developed and delivered to COR documenting: 1) work completed the previous week; 2) work scheduled for the upcoming week; 3) any issues or concerns	100% of weekly reports due COB each Wednesday
1.1	Management	Invoicing – Monthly	Monthly invoice to be developed and delivered to COR documenting, for each position/labor category: labor hours, labor rates, cost, and burn down rates for the month and annual/cumulative	100% of monthly invoices due by the 15th day of the following month (e.g. January report due February 15th, etc.)
1.2	Management	Staffing capacity	Management shall strive to achieve no unfilled vacancy in each labor category/position	100% of positions shall be vacant no more than 15% of the contract year.

10 APPENDIX II: QUALITY ASSURANCE SURVEILLANCE PLAN (QASP)

Introduction: This Quality Assurance Surveillance Plan (QASP) sets forth the procedures and guidance that CBP will use in evaluating the technical performance of the contractor in accordance with the terms and conditions of the contract. The QASP is a document that defines how the Government will monitor the contractor's performance and provides a systematic method to evaluate the services the contractor is required to perform. The contractor, and not the Government, is responsible for management and quality control actions to meet the terms of the contract. The role of the government is to ensure quality assurance contract standards are achieved.

Performance Objective	Measures	Acceptable Quality Level	Surveillance Method	Government Actions
Help desk response time	Help desk calls returned within 15 minutes of initial call	95% of calls returned within 15 minutes	Random sampling	Responsiveness reported in CPARS
Quarterly account review and reporting	Account status reports delivered to COR monthly	100% of reports delivered monthly	Report receipt at weekly meeting between COR and vendor	Responsiveness reported in CPARS
Weekly server security scanning and reporting	Workstation security reports delivered to COR weekly	95% of reports delivered weekly	Report receipt at weekly meeting between COR and vendor; Nexpose security software to scan monthly	Responsiveness reported in CPARS
Weekly workstation security scanning and reporting	Workstation security reports delivered to COR weekly	95% of reports delivered weekly	Report receipt at weekly meeting between COR and vendor; Nexpose security software to scan monthly	Responsiveness reported in CPARS

CLAUSES

52.217-5 Evaluation of Options (JULY 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(End of provision)

52.217-8 Option to Extend Services (Nov 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 30 of the order's expiration date.

(End of clause)

52.217-9 Option to Extend the Term of the Contract (Mar 2000)

- (a) The Government may extend the term of this contract by written notice to the Contractor within 30; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option clause.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 66 months.

(End of clause)

52.232-18 Availability of Funds (Apr 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

EPAAR 1552.237-72 KEY PERSONNEL (APR 1984)

(a) The Contractor shall assign to this contract the following key personnel:

To be completed at time of award.

- (b) During the first ninety (90) calendar days of performance, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by paragraph (c) below. After the initial ninety (90) calendar day period, the Contractor shall submit the information required by paragraph (c) to the Contracting Officer at least 15 calendar days prior to making any permanent substitutions.
- (c) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the persons being replaced. The Contracting Officer will notify the Contractor within 15 calendar days after receipt of all required information of the decision on substitutions. This clause will be modified to reflect any approved changes of key personnel.

Attachment to Work Statement Agency Personal Verification Procedures for Contractor Personnel October 2006

Background: Homeland Security Presidential Directive 12 (HSPD-12), signed on August 27, 2004, requires a Government-wide, common identification standard for all Federal and contractor employees requiring physical access to Federally controlled facilities and/or logical access to Federally controlled information systems. The goals of HSPD-12 are to enhance safety and security, increase Government efficiency, reduce identity fraud, and protect personal privacy.

HSPD-12 requires that the common identification be: (a) issued based on sound criteria for verifying an individual employee's identity; (b) strongly resistant to identity fraud, tampering, counterfeiting, and terrorist exploitation; (c) rapidly authenticated electronically; and (d) issued by providers whose reliability has been established by an official accreditation process.

HSPD-12 and its common identification standard require personal identity verification (PIV), background investigations, and suitability determinations for all affected contractor and subcontractor personnel. In accordance with FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel, contractors and subcontractors must comply with EPA=s master plan for implementing HSPD-12.

a) Contractor Requirements for Personal Identity Verification of Contractor Personnel (including subcontractors)

Contractor Employees Requiring Access to EPA facilities or EPA Information

Systems for at Least 24 Hours a Week for at Least 6 Months: All individual contractor employees whose work under the contract requires on-site access to an EPA controlled facility or logical access to an EPA information system for at least 24 hours a week for at least 6 months a year, will be required to undergo a background investigation in order to receive an EPA Personnel Access and Security System (EPASS) badge.

To begin the PIV process, the contractor should submit to the Contracting Officer Representative (COR) within ten (10) days of contract award or contract modification with this Attachment to Work Statement "Agency Personal Verification Procedures for Contractor Personnel," the following information in electronic format via secure means using the HSPD-12 Contractor Template found at http://epa.gov/oam/. The template was developed to assist in the transmission of the required contractor employee information in a uniform format. The template also contains drop down menus when entering data in various data cells. Specifically, the 8 data elements, Employee Type, Program Office, Work City and State, Birth State, Birth Country, Citizenship, Previous Investigation and Investigative Agency, contain drop down menus.

- Contract number:
- Contract expiration date;
- Name, address, and phone number of the Contractor Program Manager point of contact;
- Name, date of birth, place of birth (city, state, country), and Social Security Number for all contractor employees identified above. (NOTE: This information must be protected at all times, including during transmission, according to the

requirements of the Privacy Act of 1974; see http://www.epa.gov/privacy/);

- Employee Type, Position, Email address, Program Office, Work City and State,
- An indication of which contractor employees are foreign nationals;
- Name of each contractor employee claiming to have a previous, favorably adjudicated Federal background investigation on record, and the name of the Federal Agency that required the investigation, and the completion date.

The contract-level COR will upload this information to the Office of Administrative Services Information System (OASIS) personnel security database.

After submission of the preliminary information, the contractor will be notified by the contract-level COR or PSB when to begin providing all information on Standard Form (SF) 85P, Questionnaire for Public Trust Positions, and submit the form electronically to PSB via the Office of Personnel Management=s (OPM=s) Electronic Questionnaires for Investigations Processing (e-QIP) system. Instructions for using e-QIP, filling out, and submitting the SF 85P on-line, can be found at http://www.opm.gov/e-qip/reference.asp. As part of the investigative and EPASS badging processes, contractor employees must be fingerprinted, photographed and provide two forms of identification, at a time and location specified by the COR. These fingerprints will be sent to the Federal Bureau of Investigation (FBI) for processing.

Contractor employees with a favorably adjudicated Federal background investigation at the National Agency Check and Inquiries (NACI) level or above, completed within the past 5 years and verified by EPA, do not require an additional investigation unless one is requested by the Contracting Officer (CO) or Contract-level Contracting Officer Representative (COR). These employees must still be fingerprinted at a time and location specified by the COR.

In order to prevent any interruption of contractor services pending the completion of the OPM background investigation, the Office of Administrative Services (OAS) Security Management Division (SMD) has procedures in place to issue temporary or provisional badges.

When reporting in person, as directed by the contract-level COR, contractor employees must provide two forms of original identity source documents from the lists on Form I-9, OMB No.1615-0047, Employment Eligibility Verification (available at http://www.formi9.com/i-9.pdf) .At least one document shall be a valid State or Federal Government-issued picture identification.

Contractor Employees Requiring EPA Access for Less than 24 Hours a Week for 6 Months: These contractor employees may be subject to the above requirements, and may have limited and controlled access to facilities and information systems.

Foreign National Contractor Employees: To be eligible to work on-site at an EPA controlled facility or to access EPA information systems, a foreign national contractor employee must have been admitted to the U.S. on an Immigrant Visa or a Non-Immigrant Work Authorization Visa. Foreign nationals requiring access to an EPA controlled facility or EPA information system for at least 24 hours a week for at least 6 months a year must meet the above requirements for an EPASS badge, and in addition:

- In the a AContinuation Space@ on the SF 85P, provide the visa number, issuance location, and issuance date for the visa used for entry to the U.S;

- When presenting two identification source documents, as described above, provide at least one from List A on Form 1-9.

When determining a foreign national contractor employee=s eligibility for an EPASS badge, EPA will consider the type of visa presented (immigrant vs. non-immigrant) and the reciprocity agreement between the U.S. and the individual=s country of origin. These considerations are in addition to the Ared flag@ issues listed below.

Screening of the SF 85P: Information contained on the SF 85P may demonstrate that a contractor employee is not suitable to be given access to EPA facilities or information systems. PSB will screen information entered on the SF 85P prior to OPM initiating the background investigation. For individuals with admitted, derogatory information, issuance of an EPASS badge may be delayed pending further EPA review. Contractors are responsible for providing qualified personnel in accordance with requirements stated elsewhere in this contract.

Contractors will only be notified by the COR if any contractor employee is found unsuitable to perform as a result of a background investigation, and must be immediately replaced by the contractor. The following are possible "red flags":

- Employment Having been fired from a previous job, or having left under unfavorable circumstances within the past 7 years (Question 12 on the SF 85P);
- Selective Service Failure to register with the Selective Service System; this applies to male applicants born after December 31, 1959 (Question 17 on the SF 85P);
- Police Records Within the past 7 years, any arrest, charge, or conviction that has been upheld for violent or dangerous behavior or a pattern of arrests that demonstrates disregard for the law (Question 20 on the SF 85P);
- Illegal Drugs Illegal use within the previous year, or drug manufacture or other involvement for profit within the past 7 years (Question 21 on the SF 85P).

b) Returning Badges

The contractor is responsible for ensuring that all badges are returned to the COR at the conclusion of the contract or when contractor on-site services are no longer required, or when an individual contractor employee leaves.

c) Subcontracts

These requirements must be incorporated into all subcontracts wherein employees= work under the subcontract requires physical access to an EPA controlled facility or logical access to an EPA information system for 6 months or longer.

d) Appeals

Contractors have the right to appeal, in writing to the COR, a determination to deny or revoke a badge. If the COR believes an appeal is justified, he/she will forward it to:

U.S. Environmental Protection Agency Personnel

Security Branch (Mail Code 3206M) 1200

Pennsylvania Avenue, NW

Washington, DC 20460

PSB=s decision on behalf of the Agency will be final and not subject to further appeal.

e) Definitions

- AEPA Information System@ means an information system [44 U.S.C. 3502(8)] used or operated by EPA, or a contractor of EPA or other organization on behalf of the Agency.
- AEPA Controlled Facilities@ means:
 - EPA or Federally-owned buildings or leased space, whether for single or multitenant occupancy, and its grounds and approaches, all or any portion of which are under the jurisdiction, custody or control of the Agency;
 - EPA or Federally controlled commercial space shared with non-government tenants. For example, if a department or agency leased the 10th floor of a commercial building, the Directive applies to the 10th floor only;
 - Government-owned contractor-operated facilities, including laboratories;
 - The term does not apply to educational institutions that conduct activities on behalf of departments or the agency or at which Federal Employees are hosted unless specifically designated as such by the sponsoring department or agency.
- e) Foreign National means an individual who is not a United States citizen.

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1650 Arch Street Philadelphia PA 19103-2029			c. CITY Annapolis			d. STATE	e. ZIP COI	DE		
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\$438,000.00